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| 10/070,928 | 03/08/2002 | Yoshinori Tanaka | 2309/OK361US0 | 4685 |
| | 7590 | 03/12/2004 | EXAMINER | |
| Darby & Darby 805 Third Avenue New York, NY 10022 | | | CHIN, RANDALL E | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,928

Applicant(s)

TANAKA ET AL.

Examiner

Randall Chin

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 030802,080502,032703
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Claim 2, line 2, the recitation "wherein at least one sheet" having the plurality of strips should be positively recited. Claim 2, line 4, "a base material" should be positively recited.

Claim 3, line 2, are these "strips" the same as the "strips" recited back in claims 1 and 2? If so, this should be clarified.

Claim 4, line 3, "its cleaning side" should be positively recited.

Claim 5, line 3, "its cleaning side" should be positively recited.

Claim 8, line 3, "a holding sheet" should be positively recited. Claim 8, line 3, "said cleaning face" lacks proper antecedent basis.

Claim 11, line 7, "the cleaning faces" lack antecedent basis.

Claim 13, line 2, the recitation "wherein some of fibers..." is awkwardly written. The scope of claim 13 is unclear because of the negative limitation. Applicant is respectfully requested to recite claim 13 in a positive manner for clarity. Claim 13, line 4, what is "each" referring to? Also, on line 2, which fiber bundle layer is being referred to since claim 11 positively recites "at least two layers of a fiber bundle"?

Claim 15, line 2, are the "adjacent strips" the same ones recited back in claim 1?

Claim 16, line 2, "a sheet" for forming the strips should be positively recited.

Claim 18, line 2, are the "adjacent strips" the same ones recited back in claim 11?

Claim 19, line 1, "a sheet" should be positively recited.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5-7 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by EPA 0 923 902 (hereinafter EPA '902).

With respect to claim 1, EPA '902 discloses a cleaning article 1 comprising a brush portion that includes a plurality of strips (formed from base sheet 2 as a result of the cutting portions 5 as shown in Figs. 1A, 1B and 4B), and at least one layer of a fiber bundle which can be layer 3 as shown in Figs. 1A or 1B.

As for claim 2, EPA '902 teaches that there is a base sheet 2 that has the plurality of strips (Figs. 1B and 4B) formed therein and the fiber bundle layer (only one of the two layers 3) are stacked on and partially joined to "a base material" which could merely be the other one of the two layers 3 (Fig. 1A and 4A).

As for claim 3, the base material also has "strips" merely defined by brushing portions 6 (Fig. 4B).

As for claim 5, the fiber bundle layer 3 appears on the outermost face of the cleaning article on its cleaning side (Figs. 1A and 1B).

As for claim 6, EPA '902 teaches in Fig. 4B that the fibers of the fiber bundle layer are fixed to one another over a predetermined length from a portion where the

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fiber bundle layer is joined to the base material, the base material here being just one of the two layers 3.

With respect to claim 7 reciting that there is another fiber bundle layer and that one fiber bundle layer closer to the base material has a basis weight larger than the other fiber bundle layer closer to the outermost face of the cleaning article, it should be noted that EPA '902 teaches in col.8, lines 5-12 that there can be provided two or three stacked fiber bundle layers each having different fiber or filament diameters and thus different basis weights.

As for claim 15, the fiber bundle layer is partially joined to adjacent strips at midway positions of the adjacent strips as clearly shown in Fig. 4B.

As for claim 16, the sheet for forming the strips is formed of nonwoven fabric comprising thermoplastic resin film (see col.4, lines 20-24 and 53-58).

As for claim 17, the fiber bundle comprises heat-fusible thermoplastic fibers (see col.4, lines 31-38 and 53-57).

4. Claims 1-4, 6, 8-13 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayden '725.

With respect to claim 1, Hayden '725 discloses a cleaning article comprising a brush portion that includes a plurality of strips on one slitted sheet c (Fig.1), and at least one layer of a fiber bundle (one folded layer of fiber f in Fig.3).

As for claim 2, there is a sheet c having said plurality of strips formed therein stacked with a fiber bundle layer f that are partially joined to "a base material" which could merely be the other of the two sheets c on the opposite side (Fig.3).

As for claim 3, the "base material" defined with respect to claim 2 also has "strips" formed by the slits.

As for claim 4, the sheet appears on the outermost face of the cleaning article on the cleaning side (Figs.1 and 3).

As for claim 6, the fibers of the fiber bundle layer are fixed to one another over a predetermined length from a portion where the fiber bundle layer is joined to the base material by the stitching e (Fig.3).

For purposes of rejecting claim 8 (which depends on claim 2), the "base material" is defined by one of the folded sheet strips d (Fig.3) and therefore on the base material's folded outer face is a "holding sheet" which is merely the other sheet c (i.e., the bottom sheet c shown in Fig.3).

As for claim 9, between the outer face of the base material and the holding sheet as previously defined just above there is formed a holding space extending in a direction in which a holder a is inserted (Fig.3).

As for claim 10, the fiber bundle layer is joined to the base material at "two sides" (at each end of stitching line e as shown in Figs.1 and 3) of the holding space extending in a direction along which the holder is inserted.

As for claim 11, Hayden '725 teaches a cleaning article comprising at least two sheets d, d, at least one of which has a plurality of strips formed by slits, at least two

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layers of a fiber bundle f, f, and wherein said two sheets are overlaid and joined to each other at two joining portions e, e (stitching in Fig.3) which define a holding space between the confronting faces of said two sheets, said two fiber bundle layers are disposed on "the cleaning faces", respectively, of said two sheets, and are joined thereto at said two joining portions e, e (Fig.3). Note that "the cleaning faces" lack proper antecedent as recited previously and Hayden's fibers are still deemed to be disposed on the inner cleaning faces of the folded sheets d, d (Fig.3).

As for claim 12, the strips and the fiber bundle layers form a "brush portion."

As well as claim 13 is understood, some of the fibers of the fiber bundle layer are not extended continuously due to the folded arrangement of fibers f, f separated by holder or handle a between said two joining portions so as to form fiber brush portions, each extending from one of said two joining portions and having a free end (Fig.3).

As for claim 18, the fiber bundle layer is partially joined at e to adjacent strips at midway positions of the adjacent strips due to the folded arrangement of sheets d, d (Fig.3).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayden '725 in view of EPA '902.

The patent to Hayden teaches all of the recited subject matter as previously recited with the exception of a sheet for forming the strips formed of either a nonwoven fabric comprising thermoplastic fibers or a thermoplastic resin film. Note that Hayden already teaches sheet to be of felt which is a nonwoven material for dusting purposes. EPA '902 teaches a duster utilizing a sheet of material made from nonwoven fabric comprising thermoplastic resin film (see col.4, lines 20-25 and 53-55). It would have been obvious to one of ordinary skill in the art to have modified Hayden's felt sheet such that it comprises thermoplastic resin film as suggested by EPA '902 for the purpose of improving the strength of the sheet to withstand many uses.

Allowable Subject Matter

7. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent to Thompson teaches a dust mop arrangement.

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9. Any inquiry concerning this communication or earlier communication from the Examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The Examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Robert Warden, can be reached at (571) 272-1281. The number for Technology Center 1700 is (571) 272-1700.

The central fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


R. Chin


Randall Chin
Primary Examiner
Art Unit 1744